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| EXAMINER |
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OLSON, LARS A

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| ART UNIT | PAPER NUMBER |
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3617

DATE MAILED: 06/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/601,830

Applicant(s)

LITTLE, ROLLAND N.

Examiner

Lars A. Olson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 June 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 and 24-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 16-20 and 24-31 is/are allowed.
- 6) ☒ Claim(s) 1-5, 7, 8 and 10-15 is/are rejected.
- 7) ☒ Claim(s) 6 and 9 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. A petition to revive the application was granted on March 16, 2005.
2. An amendment was received from the applicant on June 28, 2004.
3. Claims 21-23 have been canceled.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 3, 7, 8, 10, 12, 13 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bartholomew (US 5,931,114) in view of Oehler (US 5,016,558), De Leu (US 6,000,353) and Carr (US 3,090,339).

Bartholomew discloses a solar-powered watercraft, as shown in Figures 1-4, that is comprised of a craft body with a deck, as shown in Figure 2, a canopy, defined as Part #10 in Figure 1, that is secured to said body and disposed over said deck, said canopy further including a means for receiving solar radiation in the form of a solar panel, defined as Part #34, that is mounted to a top face of said canopy, at least one battery pack, as shown by dashed boxes in Figure 2, that is used for powering said watercraft, as described in lines 28-32 of column 3, and a means for transferring energy

from said solar panel to said at least one battery pack, as shown by a dashed line in Figure 2.

Bartholomew, as set forth above, discloses all of the features claimed except for the use of at least one pontoon having a centerline of flotation secured in depending relation from a craft body, a battery pack that is secured to said at least one pontoon, a control console that is secured above a deck, and a pontoon with first and second sides that taper and intersect at a forward terminal edge and an aft terminal edge.

Oehler discloses a boat with a retractable canopy, as shown in Figures 1-3, said boat being comprised of a craft body with a deck, a canopy, defined as Part #16, with a headliner, defined as Part #20, that is secured to said craft body and is disposed over said deck, as shown in Figure 2, and a pair of pontoons having a centerline of flotation secured in depending relation from said craft body, as shown in Figures 1 and 2.

De Leu discloses a solar-powered watercraft, as shown in Figures 1 and 2, said watercraft including at least one battery pack, defined as Part #52, that is secured to a pontoon, defined as Part #11 or 12, a means for receiving solar radiation in the form of a solar panel, defined as Part #50, which can be in monocrystalline or polycrystalline form, a means for transferring energy from said solar panel to said battery pack, as shown by a dashed line in Figure 1, and a deck mounted control console, defined as Part #20, to provide control over the recharging of said battery pack by means of said solar panel, as described in lines 2-8 of column 3. Said pontoon has a forward section with a terminal end, an intermediate section with a flotation centerline, and an aft section with a terminal end having a rearward and downward taper, as shown in

Figure 1. Said watercraft also has an aft-oriented trim at rest, also as shown in Figure 1, that is indicated by the placement of said battery pack and an electric motor toward the stern of said watercraft.

Carr discloses a pontoon, as shown in Figures 1-6, that is comprised of first and second side surfaces, defined as Part #36, a forward terminal end, defined as Part #40, an intermediate portion, and an aft terminal end, defined as Part #40, where said side surfaces taper and intersect at a forward terminal edge, as shown in Figures 5 and 6, and also taper and intersect at an aft terminal edge, as shown in Figures 5 and 6, said forward and aft terminal edges being oriented perpendicular to a deck, defined as Part #33.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to utilize at least one pontoon, as taught by Oehler, at least one battery pack secured to a pontoon, as taught by De Leu, and a pontoon with side surfaces that taper and intersect to form forward and aft terminal edges, as taught by Carr, in combination with the solar-powered watercraft as disclosed by Bartholomew for the purpose of providing a pontoon watercraft with a means for collecting and storing solar power in order to provide an auxiliary source of power that does not require the use of a combustible fuel, a means for mounting a battery pack on a pontoon in order to provide more stability to said watercraft, and a pontoon means that moves with less resistance through a body of water.

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6. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bartholomew in view of Oehler, De Leu and Carr, and further in view of Key (US 6,263,826).

Bartholomew in combination with the teachings of Oehler, De Leu and Carr shows all of the features claimed except for the use of a battery pack that is mounted on an exterior surface of a pontoon.

Key discloses a pontoon watercraft, as shown in Figure 1, with a battery pack, defined as Part #45, which is mounted on an exterior surface of a pontoon.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to utilize a battery pack that is mounted on an exterior surface of a pontoon, as taught by Key, in combination with the solar-powered watercraft as disclosed by Bartholomew and the teachings of Oehler, De Leu and Carr for the purpose of providing a means for mounting a battery pack to a pontoon of a watercraft in order to facilitate the installation or removal of said battery pack onto or from said watercraft.

7. Claims 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bartholomew in view of Oehler, De Leu and Carr, and further in view of Fronek (US 5,725,062).

Bartholomew in combination with the teachings of Oehler, De Leu and Carr shows all of the features claimed except for the use of a canopy with a headliner that is disposed parallel to and vertically spaced from a solar panel in order to define a

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ventilation space between said solar panel and said headliner, said ventilation space being vented by a fan connected to a thermostatic switch.

Fronek discloses a solar-powered vehicle, as shown in Figure 1, that includes a canopy with a headliner, defined as Part #4, that is disposed parallel to and vertically spaced from a solar panel, defined as Part #1, defining a ventilation space between said headliner and said solar panel, and a fan, defined as Part #12, that can be automatically controlled to circulate cooling air between said solar panel and said headliner, as described in lines 5-14 of column 3.

The examiner takes official notice that the use of a thermostatic switch to control a cooling fan is known in the art.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to utilize a solar panel that is vertically spaced from a headliner of a canopy, and a fan to provide cooling air between said solar panel and said headliner of said canopy, as taught by Fronek, in combination with the solar-powered watercraft as disclosed by Bartholomew and the teachings of Oehler, De Leu and Carr for the purpose of providing a means for ventilating a space between a solar panel and a canopy of a watercraft in order to improve the generating and current-flow efficiency of said solar panel.

8. Claims 11 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bartholomew in view of Oehler, De Leu and Carr, and further in view of Locke.

Bartholomew in combination with the teachings of Oehler, De Leu and Carr shows all of the features claimed except for the use of a battery pack containing means that includes an air inlet means and an air outlet means.

Locke discloses a boat engine compartment ventilation system, as shown in Figure 1, that includes a battery pack containing means, defined as Part #12, a battery pack, defined as Part #26, an air inlet means, defined as Part #22, for said containing means, and an air outlet means, defined as Part #20, for said containing means. An air ventilation means in the form of a fan, defined as Part #16, is also provided within said containing means, as shown in Figure 1, and is connected in circuit to a thermostatic switch, defined as Part #36.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to utilize a battery pack containing means with an air inlet means, an air outlet means, and a ventilation fan, as taught by Locke, in combination with the solar-powered watercraft as disclosed by Bartholomew and the teachings of Oehler, De Leu and Carr for the purpose of providing a ventilation means for a battery pack containing means to prevent the accumulation of fumes within said battery pack containing means.

Allowable Subject Matter

9. Claims 16-20 and 24-31 are allowed.

10. Claims 6 and 9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

11. Applicant's arguments with respect to claims 1-5, 7, 8 and 10-15 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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13. Any inquiry concerning this communication from the examiner should be directed to Exr. Lars Olson whose telephone number is (703) 308-9807.

lo

June 16, 2005

LARS A. OLSON
PRIMARY EXAMINER

Lars Olson
6/16/05